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## Kale and other leafy vegetables may make your brain seem 11 years younger

**Melissa Healy LA Times Reporter**

Look into your salad bowl and think: If a fountain of cognitive youth were flowing in there, would you return every day?

In research that gives new meaning to the expression “salad days,” a study published Wednesday finds that older people who ate at least one serving of leafy greens a day had a slower rate of decline on tests of memory and thinking skills than did people who rarely or never ate these vegetables.

The [study](#) was published in the journal *Neurology*.

After almost five years, regular consumers of such veggies as kale, spinach, collard greens and lettuce enjoyed a mental edge that was the equivalent of 11 years in age.

To be sure, the top tier of leafy-vegetable consumers started with cognitive scores that were slightly higher than those in the bottom tier. That’s probably a testament to the power of lifelong eating patterns.

But over five years, the pattern of mental aging differed markedly in these two groups. Study participants who ate an average of roughly 1.3 servings of leafy greens a day experienced a decline in test performance that was about half as steep as that of participants whose daily consumption was near-zero. Those stark differences were evident even after the researchers took account of a host of factors that are known to affect mental aging, including age, gender, education, exercise, participation in cognitive activities, smoking and consumption of seafood and alcohol.

Let’s say you and your neighbor are both 75 and similar in most every way: You both completed the same amount of school, take regular walks together, don’t smoke, and gather with friends over an occasional beer. But while you enjoy a little more than a bowl of greens every day, your pal barely touches the stuff.

This long-running study would predict that at 75, your memory and thinking skills are a notch stronger than your neighbor’s. Over the next five years, hers will decline twice as fast as yours.

By the time you’re both 80, a battery of exercises that test several types of memory, as well as the speed and flexibility of your thinking, may show that your mental age is typical of a 75-year-old’s. Meanwhile, your neighbor’s performance on the same cognitive tests may look more like that of an 86-year-old.

“It’s almost unbelievable,” said [Martha Morris](#), the senior author of the study who studies nutrition and brain health at Rush University Medical Center in Chicago. “Eating these leafy greens was independently associated

with slower cognitive decline. That tells you this single food group contains so many nutrients it could be brain-protective.”

Morris and her colleagues identified a small cluster of specific nutrients that appear to offer anti-aging benefits. The leafy greens that participants were asked about are generally rich in vitamin E, folic acid, vitamin K1, lutein and beta-carotene. While inconsistent, research has suggested that some or all of these nutrients may play some role in protecting the brain against inflammation, the accumulation of toxic proteins such as beta-amyloid, and neuronal damage and death.

For lifelong avoiders of leafy greens, the study doesn't show that a late-life conversion to kale salads and spinach shakes will keep dementia at bay. But Morris said she thinks about nutrition the same way she thinks about exercise.

“You do get immediate benefits from eating healthy foods and exercising,” she said. “And you get long-term benefits.”

[Dr. Lon Schneider](#), a specialist in dementia at USC's Keck School of Medicine, says the new study offers important insights into which nutrients in the Mediterranean diet help support health in aging. But it also underscores the complexity of dementia and cognitive aging — and the absence of a “silver bullet” to counter them.

“Dementia is a complex illness, as so many chronic illnesses are,” Schneider said. “It's clearly not caused by one thing, and surely its onset and severity are not caused by one thing. This shows the environment is really important. Diet matters.”